

STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE

DOCKET NO. 2015-01

PREFILED DIRECT TESTIMONY OF PHILIP R. SHERMAN, P. E.

June 26, 2015

1 **Q. Please state your name and address.**

2 A. My name is Philip R. Sherman and I live at 444 Wilmot Center Road, Elkins, NH 03233-
3 0216.

4 **Q. How are you employed?**

5 A. I am a consulting fire protection engineer

6 **Q. What is your educational background and qualifications.**

7 A. I have an Associate in Science degree from Thames Valley State Technical College in
8 Norwich, CT, a Bachelor of Science in Civil Engineering from the University of New Haven, in
9 West Haven, CT and a Master of Science in Fire Protection Engineering from Worcester
10 Polytechnic Institute in Worcester MA.

11 **Q. Have you been retained by SEA-3, Inc.?**

12 A. Yes.

13 **Q. What did SEA-3, Inc. ask you to do?**

14 A. Visit the site, generate an initial National Fire Protection Association (NFPA) 58 fire
15 safety analysis, attend meetings, review design documents for compliance with analysis.

16 **Q. What is your understanding of the proposed expansion?**

1 A. My understanding of the expansion is that it involves installing additional railroad
2 sidings, fixed tanks and ancillary equipment for the propane transfer operation.

3 **Q. What is a fire safety analysis?**

4 A. As used in this context, the fire safety analysis for this project consists of a review of
5 proposed conditions against the level of fire safety set forth in the applicable code.

6 **Q. Can you describe the types of information contained in a fire safety analysis?**

7 A. A summary of the requirements for a fire safety analysis is as follows:

- 8 • Planning for inadvertent LP-Gas release, fire and security breach which is to be
9 coordinated with local emergency response agencies
- 10 • Planning is to consider safety of emergency response personnel, workers, and the public.
- 11 • Evaluate total product control system by taking into consideration:
 - 12 ○ Effectiveness of product control measures
 - 13 ○ Analysis of local conditions of hazard within the site
 - 14 ○ Exposure to or from other properties, population density, and congestion within
15 the site
 - 16 ○ Probable effectiveness of fire department
 - 17 ○ Consideration for the adequate application of water or other means to control
18 leakage
- 19 • Providing special protection if there is a hazard to adjacent structures.

20 **Q. What standards do you follow when you prepare a fire safety analysis?**

21 A. The New Hampshire State Fire Code, which adopts by reference NFPA Standard 58,
22 Liquefied Petroleum Gas Code, 2011 edition, and the Fire Safety Analysis Manual for LP-Gas

1 Storage Facilities (FSA Manual), developed by the NFPA and the National Propane Gas
2 Association.

3 **Q. Are there any other recognized standards that you could have followed in preparing**
4 **your analysis?**

5 A. No, the New Hampshire State Fire Code requires that I generate the fire safety analysis
6 specified by NFPA 58. There are no other standards permitted for this analysis.

7 **Q. Did you visit the site of the proposed expansion?**

8 A. Yes, on October 11, 2013.

9 **Q. Did you discuss SEA-3's proposed improvements with any government officials in**
10 **the course of preparing your fire safety analysis?**

11 A. Yes, I had various discussions with the Newington Fire Department and the New
12 Hampshire State Fire Marshal's Office.

13 **Q. Did you prepare a fire safety analysis for SEA-3's proposed improvements?**

14 A. Yes, dated November 15, 2013 and a revised version dated March 20, 2014.

15 **Q. I've provided you with a document marked PRS Exhibit 1, can you identify this**
16 **document?**

17 A. Yes, it's a copy of my fire safety analysis dated November 15, 2013, that I prepared for
18 SEA-3.

19 **Q. I've provided you with a document marked PRS Exhibit 2, can you identify this**
20 **document?**

21 A. Yes, it's a copy of my revised fire safety analysis dated March 20, 2014.

22 **Q. What is the the difference between PRS Exhibit 1 and PRS Exhibit 2?**

1 A. In PRS Exhibit2, the March 20, 2014 Analysis, I clarified that the second access road
2 would be added and I also included an updated site plan.

3 **Q. Based on the information that you reviewed what was your conclusion with respect**
4 **to whether the proposed improvements comply with NFPA 58?**

5 A. My conclusion was that the preliminary design for the proposed plant expansion is in
6 accordance with NFPA 58, 2011 edition, subject to the comments in the preliminary analysis.

7 **Q. What comments are you referring to?**

8 A. The preliminary analysis reviews information presently available, and assumes that the
9 details of the final design will be in accordance with the requirements of the code, but this cannot
10 be reviewed until the final design proceeds.

11 **Q. When the final design of the facility is completed will SEA-3 need to obtain any**
12 **permits or approvals from the Town of Newington or the State of New Hampshire to**
13 **demonstrate that its final design complies with NFPA 58?**

14 A. Yes, once the final design of the facility is completed a review of the design documents
15 will be conducted against NFPA 58, and the analysis finalized. The finalized analysis will then
16 be submitted in connection with the necessary permit applications. My involvement relates
17 primarily to the approval of local fire and building authorities.

18 **Q. Your fire safety analysis was dated March 20, 2014, prior to the Newington**
19 **Planning Board's vote to approve SEA-3'S application for sit plan approval?**

20 A. Yes.

21 **Q. Have you since had an opportunity to review SEA-3's approved site plan since you**
22 **signed your fire safety analysis dated March 20, 2014?**

23 A. Yes.

1 **Q. Was there anything shown on the approved site plan that would cause you to change**
2 **the conclusions stated in your March 20, 2014, fire safety analysis?**

3 A. No.

Exhibit List

Exhibit PRS 1 - Fire Safety Analysis Dated November 15, 2013
Exhibit PRS 2 - Fire Safety Analysis Dated March 20, 2014